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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/174,551 10/19/98 WATANABE

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EXAMINER
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WM31/0924

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POON, K	
ART UNIT	PAPER NUMBER


2624  
DATE MAILED:

*6*  
09/24/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

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<b>Office Action Summary</b>	Application No. <b>09/174,551</b>	Applicant(s) <b>Masaki Watanabe</b>	
	Examiner <b>King Y. Poon</b>	Art Unit <b>2624</b>	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**

**Period for Reply**  
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on Jul 6, 2001

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 7-15 and 21-24 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 7-15 and 21-24 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**


13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

  
**DOV POPOVICI**  
**PRIMARY EXAMINER**

**Attachment(s)**

15) <input type="checkbox"/> Notice of References Cited (PTO-892)	18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____	20) <input type="checkbox"/> Other: _____

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 7-15, 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagasaka (U.S. Patent # 5511156).

Regarding claims 7, 13: Nagasaka teaches a network system (fig. 2) composed of a print server computer (6a, fig. 2, having server process 211, column 5, lines 40-50) and a plurality of client computers, (6a, 6b, 6c, fig. 2, having a client process, column 5, lines 40-50) wherein each of the print server computer and the plurality of client computers has a print data expander (rasterizer 212, column 7, lines 5-15) for expanding print data to bit-map data, (picture elements, column 7 line 10, column 13, line 5) wherein each of the plurality of client computers comprises: a page divider (216 of column 6, lines 59-67, column 22, lines 40-45) for dividing generated print data for each page into a plurality of bands, (graphic area, column 24 table 3, fig. 27) wherein the generated print data is generated by an application; (column 6, lines 1-15) and a transfer controller (210, column 6, lines 65-67, column 7, lines 1-5) for transferring a sequentially selected (see the group are arranged in a sequence of 1, 2, 3, . . . , N to be selected

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by client process 210, column 23, lines 45-67, column 24, line 1-25, and table 3) one of the bands to an available (usable, column 7 line 51, fig. 6, fig. 7) one of print data expanders of the print server computer (column 6, lines 25-30) and other client computers, (212 of other computers, column 7, lines 1-10) wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer, (column 7, lines 5-27) and the print server computer comprises: a combiner (220 of column 7, lines 24-27) for combining bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

Regarding claim 8: Nagasaka teaches wherein the transfer controller (210, column 6, lines 65-67, column 7, lines 1-5) selects one band from the bands in sequence (see the group are arranged in a sequence of 1, 2, 3, . . . , N to be selected by client process 210, column 24, line 10-25, and table 3) and further selects an available one of the print data expanders of the print server computer and the other client computers by checking a print data expanding process status (column 7, lines 50-67, fig. 7, column 9) received from each of the print server computer and the other client computers, column 11, lines 33-50) and then transfers a selected band to a selected print data expander. (Column 6, lines 59-67, column 7, lines 1-5)

Regarding claims 9, 10: Nagasaka teaches wherein, when receiving a band (partial files, abstract) from another print data expander, (see rasterizer/expander generates a print request, (abstract) which distribute the PDL translation processing to all computers, column 6, line 25-29)

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each of the plurality of print data expanders expands the received band to bit-map band data, (column 7, lines 1-25) sets a print data expanding process status of a print data expander of its own to unavailable (error code, column 8, lines 63-64, fig. 7) while expanding the received band, and resets the print data expanding process status to available when the expanding process of the received band has been completed, (normal end code, column 8, line 63, fig. 7) wherein the print data expanding process status is used to determine whether a corresponding print data expander is available. (29, fig. 7)

Regarding claim 11: Nagasaka teaches wherein the page divider divides the generated print data for each page into the bands which are numbered from top of a page in sequence. (Fig. 27, graphic form group, table 3 of column 24 teaches to number the groups in the sequence of 1, 2, ..., N)

Regarding claim 12: Nagasaka teaches wherein the combiner (220 of column 7, lines 24-27) receives the bit-map band data expanded by the print data expander of the print server computer (6a, column 6, line 19) and the expanded bit-map band data received from said at least one of the client (6b, 6c, column 6 lines 20-30) computers, (column 7, lines 15-27, column 6, lines 25-30) determines whether the bit-map band data are received in original sequence of the bands, (see 220 arrange and the received print element groups according to table 3, column 24 line 10-25, and check conversion status of column 25 line 5-20) rearranges (column 25, lines 1-5) the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence, (one group is converted before the other, column 25 line 5-20)

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and reproduces (synthesizes, column 7, line 25) the bit-map data corresponding to the generated print data.

Regarding claim 14: Nagasaka teaches at the client computer, selecting one from the sequential bands in sequence; (see the respective portion of the divided code, (group) are selected to be transmitted to a respective interpreter of a computer, column 6 line 65-67, column 7 line 1-3) selecting an available one of the print server computer and the client computer by checking print data expanding process statuses thereof; (fig. 6, fig. 7) transferring a selected band to a selected computer; (column 7, lines 42-59; the respective portion of the divided code, (group) are selected to be transmitted to a respective interpreter of a computer, column 6 line 65-67, column 7 line 1-3) expanding a client-received band to bit-map band data; (column 7, lines 5-15) and setting a print data expanding client process status to unavailable (error code, column 8, lines 63-64, fig. 7) while expanding the client-received band and resetting the print data expanding client process status to available (normal end code, column 8, line 63, fig. 7) when a print data expanding process of the client-received band has been completed, and at the print server computer, expanding a server-received band to bit-map band data; (column 7, lines 5-15) and setting a print data expanding server process status to unavailable (error code, column 8, lines 63, fig. 7) while expanding the client-received band and resetting the print data expanding server process status to available (normal end code, column 8, line 63, fig. 7) when a print data expanding process of the client-received band has been completed.

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Regarding claim 15: Nagasaka teaches wherein the combiner (220 of column 7, lines 24-27) receives the bit-map band data expanded by the print data expander of the print server computer (6a, column 6, line 19) and the expanded bit-map band data received from said at least one of the client (6b, 6c, column 6 lines 20-30) computers, (column 7, lines 15-27, column 6, lines 25-30) determines whether the bit-map band data are received in original sequence of the bands, (see 220 arrange and the received print element groups according to table 3, column 24 line 10-25, and check conversion status of column 25 line 5-20) rearranges (column 25, lines 1-5) the bit-map band data in the original sequence when a sequence of the bit-map band data is not identical to the original sequence, (one group is converted before the other, column 25 line 5-20) and reproduces (synthesize, column 7, line 25) the bit-map data corresponding to the generated print data.

Regarding claims 21, and 23: Nagasaka teaches a network system (fig. 2) composed of a print server computer (6a, fig. 2, having server process 211, column 5, lines 40-50) comprising a plurality of client computers, (6a, 6b, 6c, fig. 2, having a client process, column 5, lines 40-50) wherein each of the plurality of client computers comprises: a first print data expander (rasterizer 212, of the client computers, column 7, lines 5-15) for expanding print data to bit-map data; (picture elements, column 7, line 10) a page divider (216 of column 6, lines 59-67, column 22, lines 40-45) for dividing generated print data for each page into a plurality of bands, (graphic area, column 24, table 3, fig. 27) wherein the generated print data is generated by an application; (column 6, lines 1-15) and a transfer controller (210, column 6, lines 65-67, column 7, lines 1-5)

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for transferring a sequentially selected (see the group are arranged in a sequence of 1, 2, 3, . . . , N to be selected by client process 210, column 23, lines 45-67, column 24, line 1-25, and table 3) one of the bands to an available (usable, column 7 line 51, fig. 6, fig. 7) one of print data expanders of the print server computer (column 6, lines 25-30) and other client computers, (212 of other computers, column 7, lines 1-10) wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer, (column 7, lines 5-27) the print server computer comprising: a second print data expander (rasterizer 212, of the computer 6a, column 7, lines 5-15) for expanding print data received from at least one of the client computers to bit-map band data; a combiner (220 of column 7, lines 24-27) for combining bit-map band data expanded by the print data expander of the print server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print data.

Regarding claims 22 and 24: Nagasaka teaches a network system (fig. 2) composed of a client computer (6a, fig. 2, having a client process, column 5, lines 40-50) comprising of a print server computer (6a, fig. 2, having server process 211, column 5, lines 40-50, for sending print data to a printer, column 7, lines 25-35) and a plurality of client computers, (6b, 6c, fig. 2) comprising: a print data expander (rasterizer 212, column 7, lines 5-15) for expanding print data to bit-map data; (picture elements, column 7, line 10) a page divider (216 of column 6, lines 59-67, column 22, lines 40-45) for dividing generated print data for each page into a plurality of bands, (graphic area, column 24 table 3, fig. 27) wherein the generated print data is generated by



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an application; (column 6, lines 1-15) and a transfer controller (210, column 6, lines 65-67, column 7, lines 1-5) for transferring a sequentially selected (see the group are arranged in a sequence of 1, 2, 3, . . . , N to be selected by client process 210, column 23, lines 45-67, column 24, line 1-25, and table 3) one of the bands to an available (usable, column 7 line 51, fig. 6, fig. 7) one of print data expanders of the print server computer (column 6, lines 25-30) and other client computers, (212 of other computers, column 7, lines 1-10) wherein expanded bit-map band data by the print data expander of each client computer is transferred to the print server computer, (column 7, lines 5-27) wherein the print server computer combines (column 7, lines 24-27) bit-map band data expanded by the printer server computer and the expanded bit-map band data received from at least one of the client computers to produce bit-map data corresponding to the generated print date.

### *Response to Arguments*

3. Applicant's arguments filed 7/6/2001 have been fully considered but they are not persuasive.

With respect to applicant argument that "Nagasaka fails to teach the print server computer combines bitmap band data expanded by the print data expander of the print server computer and the expanded bitmap band data received from at least of the client computers to produce bitmap data corresponding to the generated print data" has been considered but is not found to be persuasive because of the following reason(s):

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Nagasaka teaches the print server computer (6a, fig. 2, having server process 211, column 5, lines 40-50, for sending print data to a printer, column 7, lines 25-35) combines bitmap band data expanded by the print data expander (220, column 7, lines 24-27, column 6, lines 25-30) of the print server computer and the expanded bitmap band data received from at least of the client computers (column 7, lines 5-27) to produce bitmap data corresponding to the generated print data.

4. ACTION IS FINAL

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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*Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

September 18, 2001

  
DOV POPOVICI  
PRIMARY EXAMINER